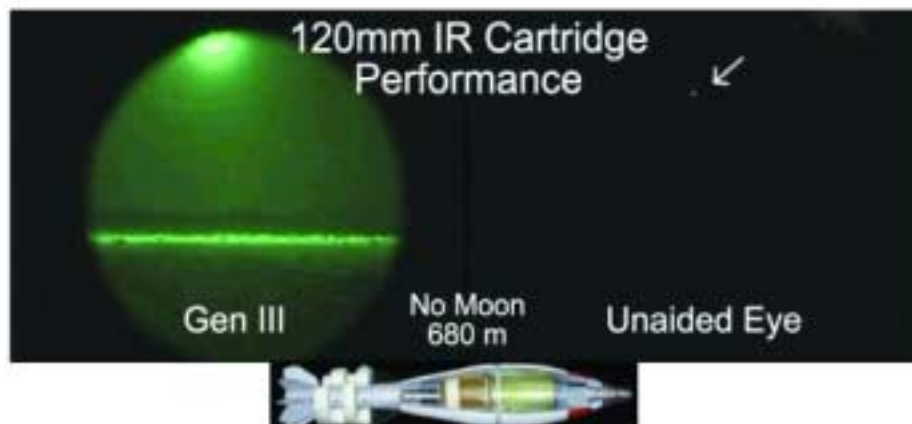


Mortar (120mm)



MISSION

Provide organic indirect fire support to the maneuver unit commander.

DESCRIPTION AND SPECIFICATIONS

The 120mm mortar system is a conventional smoothbore, muzzle-loaded mortar system that provides increased range, lethality, and safety compared to the World War II-vintage 4.2-inch (107mm) heavy mortar system it replaced in mechanized infantry, motorized, armored, and cavalry units. It is employed in both towed (M120) and carrier versions (M121) and fires a family of enhanced, U.S.-produced ammunition. The Mortar Fire Control System (MFCS) will provide Paladin-like (M109A6) fire control capability that greatly improves mortar lethality, responsiveness, and crew survivability. MFCS links mortar fires with the digital battlefield. It integrates a fire control computer with an inertial navigation and pointing system, allowing crews to fire in less than 1 minute, down from the current 8–12 minute (day/night) standard. The M303 sub-caliber tube insert enables mortar crews to perform cost-effective live-fire training with stockpiled older M300 series 81mm ammunition. New infrared illumination ammunition, the first of its kind in the world, provides enhanced night fighting capability. Munitions in the Advanced Technology Demonstration phase include the XM395 Precision Guided Mortar Munition (PGMM) and the XM984 Dual Purpose Improved Conventional Munition (DPICM). PGMM is a 120mm extended-range precision-guided munition with a strap-down laser detector seeker, making it a surgical strike, organic weapon for the Battalion Commander. DPICM is an extended-range munition that incorporates composites to maximize the number of dual-purpose grenades that can be carried.

Range: 7,240 m

Rate of fire: 16 rounds/min for the first minute; 4 rounds/min sustained

Weight: 319 lb

Crew: 4 M121 carrier-mounted on the M1064; 5 M120 towed

Ammunition: High explosive, smoke, illumination (visible light and infrared), full-range practice

FOREIGN COUNTERPART

Many countries have similar systems.

FOREIGN MILITARY SALES

None

PROGRAM STATUS

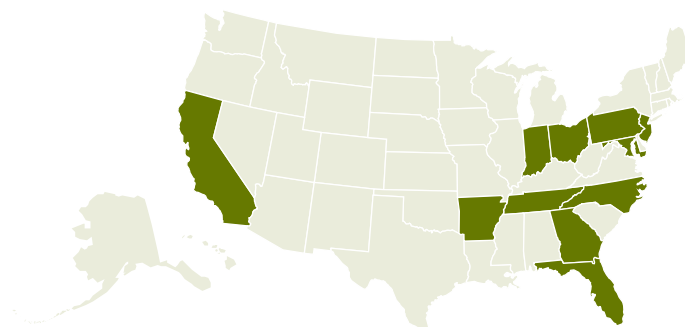
- The Mortar Ballistic Computer (MBC) qualified new hardware platform, integrated existing MBC software, conducted limited user test and began fielding; Initial fielding of the 120mm mortar system was completed; M120 version was issued to the Initial Brigade Combat Team and 82nd Airborne Division. The M67 sight unit, currently used on 120mm mortar, qualified for use on the M224 60mm and M252 81mm mortars. MFCS currently in engineering and manufacturing development. The M934A1 High Explosive Round production has commenced. The XM395 PGMM and XM984 DPICM are currently in the Advanced Technology Demonstration phase.

PROJECTED ACTIVITIES

- PGMM:** In FY01, PGMM will complete component high-G testing, demonstrate the extended-range glide concept and live fire.
- DPICM:** In FY01, DPICM will demonstrate its rocket motor extended-range capability via live fire.
- XM930 Visible Light Illum Round:** In FY01, Conditional materiel release; limited fielding scheduled.
- M983 Infrared Illuminating Round:** In FY01, full materiel release.
- MFCS:** In 3QFY02, MFCS will complete software development, complete technical testing, conduct initial operational test and begin fielding.
- M934A1E1 HE round (IM compliant):** In FY03, production of a new insensitive munition cartridge scheduled. A materiel change to develop and qualify an insensitive munition solution for the M934A1 HE round approved.

PRIME CONTRACTORS

Hitec (Camden, AR); Pocal Industries (Scranton, PA); SNC-TEC (Quebec, Canada); KDI (Cincinnati, OH); Chamberlain Manufacturing Corporation (Scranton, PA); Pine Bluff Arsenal (Pine Bluff, AR); Lockheed Martin (Orlando, FL; Archbald, PA); Primex Technologies (St. Petersburg, FL); Matech (Hebron, MD); Brockway Standard (Atlanta, GA); United Ammo Container (Milan, TN); Crane AAA (Crane, IN); Mills Manufacturing (Ashville, NC); Armtec (Coachella, CA); Junghans (FRG)



* See appendix for list of subcontractors

